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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/878,427

06/12/2001

Takaaki Konishi

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02/16/2006

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

ZHENG, EVA Y

ART UNIT

PAPER NUMBER

2634

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/878,427

Applicant(s)

KONISHI ET AL.

Examiner

Eva Yi Zheng

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Request for Continued Examination

1. The request filed on Dec 2, 2005, for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/878,427 is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5, 6, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitation: "gain change means takes", "first threshold means taking", "second threshold means taking", "signal generator to take", are confusing.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Maalej et al. (US 6,545,532).

As shown in figures, 1, 2 and 5, Maalej et al. discloses a digital broadcast receiving apparatus for amplifying a digital modulated signal wave propagated through air with gain automatically adjusted to have a predetermined amplitude, and demodulating the modulated signal wave to a digital signal, the digital broadcast receiving apparatus comprising:

(1) regarding to claims 1 and 8:

tuner means (96) for frequency-converting said received digital modulated signal wave into a first modulated signal (IF);

first automatic gain control amplification means (AGC1 10) for controlling gain of said tuner means to make a level of said first modulated signal at a first predetermined level (column 6, lines 9-16);

A/D conversion means (25) for converting, analog to digital, said first modulated signal into a second modulated signal (14);

demodulation means (30 and 35) for demodulating said second modulated signal into a first demodulated digital signal (I and Q); and

second automatic gain control amplification means (AGC2 20 and 50) for amplifying a level of said first demodulated digital signal by following frequency fluctuations of oscillation amplitude thereof to be at a second predetermined level, and generating a second demodulated digital signal (column 5, lines 36-54 and column 6, lines 46-65 and column 7, lines 18-37).

(2) regarding to claims 2 and 9: Maalej et al. discloses wherein said first automatic gain control amplification means controls amplification of the digital modulated signal wave without flowing frequency fluctuations thereof for generation of the first modulated signal (column 6, lines 9-16) (column 5, lines 36-54, column 6, lines 46-65 and column 7, lines 18-37).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 4, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maalej et al. (US 6,545,532) in view of AAPA (applicant admitted prior art).

a) Regarding to claims 3 and 10, Maalej et al. disclose a digital broadcast receiving apparatus for amplifying a digital modulated signal wave propagated through air with gain automatically adjusted to have a predetermined amplitude, and demodulating the

modulated signal wave to a digital signal, the digital broadcast receiving apparatus comprising:

a tuner means (96) for frequency-converting said received digital modulated signal wave into a first modulated signal (IF);

a first automatic gain control amplification means (AGC1 10) for controlling gain of said tuner means to make a level of said first modulated signal at a first predetermined level (column 6, lines 9-16);

a A/D conversion means (25) for converting, analog to digital, said first modulated signal into a second modulated signal (14);

demodulation means (30 and 35) for demodulating said second modulated signal into a first demodulated digital signal (I and Q); and

second automatic gain control amplification means (AGC2 20 and 50) for amplifying a level of said first demodulated digital signal by following frequency fluctuations of oscillation amplitude thereof to be at a second predetermined level, and generating a second demodulated digital signal (column 5, lines 36-54 and column 6, lines 46-65 and column 7, lines 18-37).

Maalej et al. disclose all the subject matters above except for the specific teaching of the first automatic gain control signal by following smaller than a first predetermined frequency and the second automatic gain control signal by following larger than the first predetermined frequency.

However, in AAPA (Fig. 21, [0005]), AGC compare with a predetermined level and proceed differently whether it's larger, equal to, or lower. It is well known that

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automatic gain control is a device for adjusting signal when compared with a reference signal. Therefore, it is obvious to one of ordinary skill in art at the time of invention to understand the functionality of AGC in QAM system of Maalej et al. By using AGC, control signal quality and achieve desirable result.

b) Regarding to claims 4 and 11, AAPA disclose

level detection means for detecting a level of the second modulated signal (LD in Fig. 21); and

gain change means for changing the gain of said tuner means based on the detected level (SG in Fig. 21).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Y Zheng whose telephone number is 571-272-3049. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Chieh can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eva Yi Zheng
Examiner
Art Unit 2634

February 9, 2006


CHIEH M. FAN
SUPERVISORY PATENT EXAMINER